

# SEQUENCE LISTING

<110> BOYLE, WILLIAM  
HSU, HAILING

<120> RECEPTOR FROM TNF FAMILY

<130> A-570B

<140> NOT YET ASSIGNED

<141> 2001-02-12

<150> 60/181,800

<151> 2000-02-11

<160> 52

<170> PatentIn version 3.0

<210> 1

<211> 1173

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (143)..(997)

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ccttcaaagt tcaagtagtg at atg gat gac tcc aca gaa agg gag cag tca 172  
Met Asp Asp Ser Thr Glu Arg Glu Gln Ser  
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Cys	Val	Ser	Ile	Leu	Pro	Arg	Lys	Glu	Ser	Pro	Ser	Val	Arg	Ser	Ser	
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Lys	Asp	Gly	Lys	Leu	Leu	Ala	Ala	Thr	Leu	Leu	Leu	Ala	Leu	Leu	Ser	
		45					50					55				
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Cys	Cys	Leu	Thr	Val	Val	Ser	Phe	Tyr	Gln	Val	Ala	Ala	Leu	Gln	Gly	
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gac	ctg	gcc	agc	ctc	cgg	gca	gag	ctg	cag	ggc	cac	cac	gcg	gag	aag	412
Asp	Leu	Ala	Ser	Leu	Arg	Ala	Glu	Leu	Gln	Gly	His	His	Ala	Glu	Lys	
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Leu	Pro	Ala	Gly	Ala	Gly	Ala	Pro	Lys	Ala	Gly	Leu	Glu	Glu	Ala	Pro	
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Ala	Val	Thr	Ala	Gly	Leu	Lys	Ile	Phe	Glu	Pro	Pro	Ala	Pro	Gly	Glu	
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Thr	Pro	Thr	Ile	Gln	Lys	Gly	Ser	Tyr	Thr	Phe	Val	Pro	Trp	Leu	Leu	
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Ser	Phe	Lys	Arg	Gly	Ser	Ala	Leu	Glu	Glu	Lys	Glu	Asn	Lys	Ile	Leu	
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Val	Lys	Glu	Thr	Gly	Tyr	Phe	Phe	Ile	Tyr	Gly	Gln	Val	Leu	Tyr	Thr	
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aat	atg	cct	gaa	aca	cta	ccc	aat	aat	tcc	tgc	tat	tca	gct	ggc	att	892
Asn	Met	Pro	Glu	Thr	Leu	Pro	Asn	Asn	Ser	Cys	Tyr	Ser	Ala	Gly	Ile	
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Ala	Lys	Leu	Glu	Glu	Gly	Asp	Glu	Leu	Gln	Leu	Ala	Ile	Pro	Arg	Glu	
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Lys Leu Leu  
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<211> 285

<212> PRT

<213> Homo sapiens

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Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly Lys Leu Leu  
35 40 45

Ala Ala Thr Leu Leu Leu Ala Leu Leu / Ser Cys Cys Leu Thr Val Val  
50 55 60

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg  
65 70 75 80

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Gly  
85 90 95

Ala Pro Lys Ala Gly Leu Glu Glu Ala Pro Ala Val Thr Ala Gly Leu  
100 105 110

Lys Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn  
115 120 125

Ser Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln  
130 135 140

Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys  
145 150 155 160

Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser  
165 170 175

Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu Thr Gly Tyr  
180 185 190

Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met  
195 200 205

Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu  
210 215 220

Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu  
225 230 235 240

Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu Gly  
245 250 255

Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu  
260 265 270

Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu  
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<210> 3

<211> 1139

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (52) .. (978)

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Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys Ser Glu  
5 10 15

aaa gga gaa gat atg aaa gtg gga tat gat ccc atc act ccg cag aag 153

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Glu	Glu	Gly	Ala	Trp	Phe	Gly	Ile	Cys	Arg	Asp	Gly	Arg	Leu	Leu	Ala	
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gct	acc	ctc	ctg	ctg	gcc	ctg	ttg	tcc	agc	agt	ttc	aca	gcg	atg	tcc	249
Ala	Thr	Leu	Leu	Leu	Ala	Leu	Leu	Ser	Ser	Ser	Phe	Thr	Ala	Met	Ser	
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ttg	tac	cag	ttg	gct	gcc	ttg	caa	gca	gac	ctg	atg	aac	ctg	cgc	atg	297
Leu	Tyr	Gln	Leu	Ala	Ala	Leu	Gln	Ala	Asp	Leu	Met	Asn	Leu	Arg	Met	
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Glu	Leu	Gln	Ser	Tyr	Arg	Gly	Ser	Ala	Thr	Pro	Ala	Ala	Ala	Gly	Ala	
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Pro	Glu	Leu	Thr	Ala	Gly	Val	Lys	Leu	Leu	Thr	Pro	Ala	Ala	Pro	Arg	
100						105					110					
ccc	cac	aac	tcc	agc	cgc	ggc	cac	agg	aac	aga	cgc	gct	ttc	cag	gga	441
Pro	His	Asn	Ser	Ser	Arg	Gly	His	Arg	Asn	Arg	Arg	Ala	Phe	Gln	Gly	
115					120					125					130	
cca	gag	gaa	aca	gaa	caa	gat	gta	gac	ctc	tca	gct	cct	cct	gca	cca	489
Pro	Glu	Glu	Thr	Glu	Gln	Asp	Val	Asp	Leu	Ser	Ala	Pro	Pro	Ala	Pro	
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tgc	ctg	cct	gga	tgc	cgc	cat	tct	caa	cat	gat	gat	aat	gga	atg	aac	537
Cys	Leu	Pro	Gly	Cys	Arg	His	Ser	Gln	His	Asp	Asp	Asn	Gly	Met	Asn	
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ctc	aga	aac	atc	att	caa	gac	tgt	ctg	cag	ctg	att	gca	gac	agc	gac	585
Leu	Arg	Asn	Ile	Ile	Gln	Asp	Cys	Leu	Gln	Leu	Ile	Ala	Asp	Ser	Asp	
		165						170				175				
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Thr	Pro	Thr	Ile	Arg	Lys	Gly	Thr	Tyr	Thr	Phe	Val	Pro	Trp	Leu	Leu	
		180				185					190					
agc	ttt	aaa	aga	gga	aat	gcc	ttg	gag	gag	aaa	gag	aac	aaa	ata	gtg	681
Ser	Phe	Lys	Arg	Gly	Asn	Ala	Leu	Glu	Glu	Lys	Glu	Asn	Lys	Ile	Val	
195					200					205					210	
gtg	agg	caa	aca	ggc	tat	ttc	ttc	atc	tac	agc	cag	gtt	cta	tac	acg	729
Val	Arg	Gln	Thr	Gly	Tyr	Phe	Phe	Ile	Tyr	Ser	Gln	Val	Leu	Tyr	Thr	
				215					220					225		
gac	ccc	atc	ttt	gct	atg	ggg	cat	gtc	atc	cag	agg	aag	aaa	gta	cac	777
Asp	Pro	Ile	Phe	Ala	Met	Gly	His	Val	Ile	Gln	Arg	Lys	Lys	Val	His	
			230					235					240			
gtc	ttt	ggg	gac	gag	ctg	agc	ctg	gtg	acc	ctg	ttc	cga	tgt	att	cag	825
Val	Phe	Gly	Asp	Glu	Leu	Ser	Leu	Val	Thr	Leu	Phe	Arg	Cys	Ile	Gln	
		245					250					255				
aat	atg	ccc	aaa	aca	ctg	ccc	aac	aat	tcc	tgc	tac	ttg	gct	ggc	atc	873
Asn	Met	Pro	Lys	Thr	Leu	Pro	Asn	Asn	Ser	Cys	Tyr	Leu	Ala	Gly	Ile	
	260					265					270					
gcg	agg	ctg	gaa	gaa	gga	gat	gag	att	cag	ctt	gca	att	cct	cgg	gag	921

Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu  
275 280 285 290

aat gca cag att tca cgc aac gga gac gac acc ttc ttt ggt gcc cta 969  
Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu  
295 300 305

aaa ctg ctg taactcactt gctggagtgc gtgatcccct tccctcgtct 1018  
Lys Leu Leu

tctctgtacc tccgagggag aaacagacga ctggaaaaat aaaagatggg gaaagccgtc 1078  
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<210> 4

<211> 309

<212> PRT

<213> Mus musculus

<400> 4

Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys  
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Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro  
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Gln Lys Glu Glu Gly Ala Trp Phe Gly Ile Cys Arg Asp Gly Arg Leu  
35 40 45

Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Ser Ser Phe Thr Ala  
50 55 60

Met Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu  
65 70 75 80

Arg Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala  
85 90 95

Gly Ala Pro Glu Leu Thr Ala Gly Val Lys Leu Leu Thr Pro Ala Ala  
100 105 110

Pro Arg Pro His Asn Ser Ser Arg Gly His Arg Asn Arg Arg Ala Phe  
115 120 125

Gln Gly Pro Glu Glu Thr Glu Gln Asp Val Asp Leu Ser Ala Pro Pro  
130 135 140

Ala Pro Cys Leu Pro Gly Cys Arg His Ser Gln His Asp Asp Asn Gly  
145 150 155 160

Met Asn Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp  
165 170 175

Ser Asp Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp  
180 185 190

Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys  
195 200 205

Ile Val Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu  
210 215 220

Tyr Thr Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys  
225 230 235 240

Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys  
245 250 255

Ile Gln Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Leu Ala  
260 265 270

Gly Ile Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro  
275 280 285

Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly  
290 295 300

Ala Leu Lys Leu Leu  
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<210> 5

<211> 278

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> X = one or more naturally occurring amino acid residues.

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Xaa Xaa Lys Xaa Glu Xaa Met Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
20 25 30  
Xaa Xaa Xaa Glu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Gly Xaa Leu  
35 40 45  
Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Xaa Xaa Xaa Thr Xaa  
50 55 60  
Xaa Ser Xaa Tyr Gln Xaa Ala Ala Leu Gln Xaa Asp Leu Xaa Xaa Leu  
65 70 75 80  
Arg Xaa Glu Leu Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Ala Xaa Ala  
85 90 95  
Gly Ala Pro Xaa Xaa Thr Ala Gly Xaa Lys Xaa Xaa Xaa Pro Xaa Ala  
100 105 110  
Pro Xaa Xaa Xaa Asn Ser Ser Xaa Xaa Xaa Arg Asn Xaa Arg Ala Xaa  
115 120 125  
Gln Gly Pro Glu Glu Thr Xaa Xaa Gln Asp Cys Leu Gln Leu Ile Ala  
130 135 140  
Asp Ser Xaa Thr Pro Thr Ile Xaa Lys Gly Xaa Tyr Thr Phe Val Pro  
145 150 155 160  
Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn  
165 170 175  
Lys Ile Xaa Val Xaa Xaa Thr Gly Tyr Phe Phe Ile Tyr Xaa Gln Val  
180 185 190  
Leu Tyr Thr Asp Xaa Xaa Xaa Ala Met Gly His Xaa Ile Gln Arg Lys  
195 200 205  
Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg  
210 215 220  
Cys Ile Gln Asn Met Pro Xaa Thr Leu Pro Asn Asn Ser Cys Tyr Ser  
225 230 235 240  
Ala Gly Ile Ala Xaa Leu Glu Glu Gly Asp Glu Xaa Gln Leu Ala Ile  
245 250 255  
Pro Arg Glu Asn Ala Gln Ile Ser Xaa Xaa Gly Asp Xaa Thr Phe Phe  
260 265 270  
Gly Ala Leu Lys Leu Leu  
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<210> 6

<211> 102

<212> PRT

<213> Consensus



<220>

<221> misc\_feature

<223> X = one or more any naturally occurring amino acid residues.

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Xaa Pro Ala Ala His Leu Thr Xaa Pro Xaa Leu Xaa Trp Ala Xaa Leu  
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Ser Xaa Gly Val Xaa Leu Xaa Asn Xaa Leu Val Val Xaa Gly Leu Tyr  
20 25 30  
Phe Ile Tyr Ser Gln Val Xaa Phe Xaa Gly Gln Xaa Cys Pro Xaa Val  
35 40 45  
Xaa Leu Xaa His Xaa Val Xaa Val Xaa Tyr Pro Xaa Leu Leu Ser Xaa  
50 55 60  
Thr Xaa Cys Xaa Trp Xaa Ser Xaa Tyr Leu Gly Gly Val Phe Xaa Leu  
65 70 75 80  
Xaa Gly Asp Xaa Leu Tyr Val Asn Val Xaa Ser Xaa Phe Xaa Thr Phe  
85 90 95  
Phe Gly Leu Phe Lys Leu  
100

<210> 7

<211> 143

<212> PRT

<213> Homo sapiens

<400> 7

Glu Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn  
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Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu  
20 25 30  
Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Leu Asn Glu Thr  
35 40 45  
Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys  
50 55 60  
Asn Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr  
65 70 75 80  
Pro Gln Asp Leu Val Met Met Glu Gly Lys Met Met Ser Tyr Cys Thr  
85 90 95  
Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn

100 105 110  
 Leu Thr Ser Ala Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu  
 115 120 125  
 Val Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu Tyr Lys Leu  
 130 135 140

<210> 8  
 <211> 143  
 <212> PRT  
 <213> Mus musculus

<400> 8

Glu Lys Lys Glu Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro His  
 1 5 10 15  
 Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu  
 20 25 30  
 Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Thr  
 35 40 45  
 Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys  
 50 55 60  
 Asn Asn Gln Pro Ile Asn His Lys Val Tyr Met Arg Asn Ser Lys Tyr  
 65 70 75 80  
 Pro Glu Asp Leu Val Leu Met Glu Glu Lys Arg Leu Asn Tyr Cys Thr  
 85 90 95  
 Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn  
 100 105 110  
 Leu Thr Ser Ala Asp His Leu Val Tyr Asn Ile Ser Gln Leu Ser Leu  
 115 120 125  
 Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu  
 130 135 140

<210> 9  
 <211> 143  
 <212> PRT  
 <213> Rattus rattus

<400> 9

Glu Thr Lys Lys Pro Arg Ser Val Ala His Leu Thr Gly Asn Pro Arg  
 1 5 10 15  
 Ser Arg Ser Ile Pro Leu Glu Trp Glu Asp Thr Tyr Gly Thr Ala Leu  
 20 25 30

Ile Ser Gly Val Lys Tyr Lys Lys Gly Gly Leu Val Ile Asn Glu Ala  
35 40 45  
Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys  
50 55 60  
Asn Ser Gln Pro Leu Ser His Lys Val Tyr Met Arg Asn Phe Lys Tyr  
65 70 75 80  
Pro Gly Asp Leu Val Leu Met Glu Glu Lys Lys Leu Asn Tyr Cys Thr  
85 90 95  
Thr Gly Gln Ile Trp Ala His Ser Ser Tyr Leu Gly Ala Val Phe Asn  
100 105 110  
Leu Thr Val Ala Asp His Leu Tyr Val Asn Ile Ser Gln Leu Ser Leu  
115 120 125  
Ile Asn Phe Glu Glu Ser Lys Thr Phe Phe Gly Leu Tyr Lys Leu  
130 135 140  
<210> 10  
<211> 146  
<212> PRT  
<213> Homo sapiens  
  
<400> 10  
Gly Asp Gln Asn Pro Gln Ile Ala Ala Arg Val Ile Ser Glu Ala Ser  
1 5 10 15  
Ser Lys Thr Thr Ser Val Leu Gln Trp Ala Glu Lys Gly Tyr Tyr Thr  
20 25 30  
Met Ser Asn Asn Leu Val Thr Leu Glu Asn Gly Lys Gln Leu Thr Val  
35 40 45  
Lys Arg Gln Gly Leu Tyr Tyr Ile Tyr Ala Gln Val Thr Phe Cys Ser  
50 55 60  
Asn Arg Glu Ala Ser Ser Gln Ala Pro Phe Ile Ala Ser Leu Cys Leu  
65 70 75 80  
Lys Ser Pro Gly Arg Phe Glu Arg Ile Leu Leu Arg Ala Ala Asn Thr  
85 90 95  
His Ser Ser Ala Lys Pro Cys Gly Gln Gln Ser Ile His Leu Gly Gly  
100 105 110  
Val Phe Glu Leu Gln Pro Gly Ala Ser Val Phe Val Asn Val Thr Asp  
115 120 125  
Pro Ser Gln Val Ser His Gly Thr Gly Phe Thr Ser Phe Gly Leu Leu  
130 135 140  
Lys Leu  
145

<210> 11  
<211> 146  
<212> PRT  
<213> Mus musculus

<400> 11

Gly Asp Glu Asp Pro Gln Ile Ala Ala His Val Val Ser Glu Ala Asn  
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Ser Asn Ala Ala Ser Val Leu Gln Trp Ala Lys Lys Gly Tyr Tyr Thr  
20 25 30  
Met Lys Ser Asn Leu Val Met Leu Glu Asn Gly Lys Gln Leu Thr Val  
35 40 45  
Lys Arg Glu Gly Leu Tyr Tyr Val Tyr Thr Gln Val Thr Phe Gln Ser  
50 55 60  
Asn Arg Glu Pro Ser Ser Gln Arg Pro Phe Ile Val Gly Leu Trp Leu  
65 70 75 80  
Lys Pro Ser Ile Gly Ser Glu Arg Ile Leu Leu Lys Ala Ala Asn Thr  
85 90 95  
His Ser Ser Ser Gln Leu Cys Glu Gln Gln Ser Val His Leu Gly Gly  
100 105 110  
Val Phe Glu Leu Gln Ala Gly Ala Ser Val Phe Val Asn Val Thr Glu  
115 120 125  
Ala Ser Gln Val Ile His Arg Val Gly Phe Ser Ser Phe Gly Leu Leu  
130 135 140  
Lys Leu  
145

<210> 12  
<211> 144  
<212> PRT  
<213> Homo sapiens

<400> 12

Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr  
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Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys  
20 25 30  
Arg Gly Ser Ala Leu Glu Glu Lys Glu Asn Lys Ile Leu Val Lys Glu  
35 40 45  
Thr Gly Tyr Phe Phe Ile Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr

50 55 60  
Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val Phe Gly  
65 70 75 80  
Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro  
85 90 95  
Glu Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Lys Leu  
100 105 110  
Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln  
115 120 125  
Ile Ser Leu Asp Gly Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu  
130 135 140

<210> 13

<211> 147

<212> PRT

<213> Mus musculus

<400> 13

Leu Arg Asn Ile Ile Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Asp  
1 5 10 15  
Thr Pro Thr Ile Arg Lys Gly Thr Tyr Thr Phe Val Pro Trp Leu Leu  
20 25 30  
Ser Phe Lys Arg Gly Asn Ala Leu Glu Glu Lys Glu Asn Lys Ile Val  
35 40 45  
Val Arg Gln Thr Gly Tyr Phe Phe Ile Tyr Ser Gln Val Leu Tyr Thr  
50 55 60  
Asp Pro Ile Phe Ala Met Gly His Val Ile Gln Arg Lys Lys Val His  
65 70 75 80  
Val Phe Gly Asp Glu Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln  
85 90 95  
Asn Met Pro Lys Thr Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile  
100 105 110  
Ala Arg Leu Glu Glu Gly Asp Glu Ile Gln Leu Ala Ile Pro Arg Glu  
115 120 125  
Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr Phe Phe Gly Ala Leu  
130 135 140

Lys Leu Leu  
145

<210> 14

<211> 160

<212> PRT

<213> Mus musculus

<400> 14

Gly Lys Pro Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Ala  
1 5 10 15  
Ser Ile Pro Ser Gly Ser His Lys Val Thr Leu Ser Ser Trp Tyr His  
20 25 30  
Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Leu Ser Asn Gly Lys  
35 40 45  
Leu Arg Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys  
50 55 60  
Phe Arg His His Glu Thr Ser Gly Ser Val Pro Thr Asp Tyr Leu Gln  
65 70 75 80  
Leu Met Val Tyr Val Val Lys Thr Ser Ile Lys Ile Pro Ser Ser His  
85 90 95  
Asn Leu Met Lys Gly Gly Ser Thr Lys Asn Trp Ser Gly Asn Ser Glu  
100 105 110  
Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ala  
115 120 125  
Gly Glu Glu Ile Ser Ile Gln Val Ser Asn Pro Ser Leu Leu Asp Pro  
130 135 140  
Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Gln Asp Ile Asp  
145 150 155 160

<210> 15

<211> 160

<212> PRT

<213> Homo sapiens

<400> 15

Ser Lys Leu Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr  
1 5 10 15  
Asp Ile Pro Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His  
20 25 30  
Asp Arg Gly Trp Ala Lys Ile Ser Asn Met Thr Phe Ser Asn Gly Lys  
35 40 45  
Leu Ile Val Asn Gln Asp Gly Phe Tyr Tyr Leu Tyr Ala Asn Ile Cys  
50 55 60  
Phe Arg His His Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln  
65 70 75 80

Leu Met Val Tyr Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Ser His  
85 90 95  
Thr Leu Met Lys Gly Gly Ser Thr Lys Tyr Trp Ser Gly Asn Ser Glu  
100 105 110  
Phe His Phe Tyr Ser Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser  
115 120 125  
Gly Glu Glu Ile Ser Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro  
130 135 140  
Asp Gln Asp Ala Thr Tyr Phe Gly Ala Phe Lys Val Arg Asp Ile Asp  
145 150 155 160

<210> 16

<211> 166

<212> PRT

<213> Homo sapiens

<400> 16

Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr Arg Gly  
1 5 10 15  
Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys Ala Leu  
20 25 30  
Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His Ser Phe  
35 40 45  
Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His Glu Lys  
50 55 60  
Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Glu  
65 70 75 80  
Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr Ile Tyr  
85 90 95  
Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser Ala Arg  
100 105 110  
Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser Ile Tyr  
115 120 125  
Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe Val Ser  
130 135 140  
Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser Phe Phe  
145 150 155 160  
Gly Ala Phe Leu Val Gly  
165

<210> 17

<211> 172

<212> PRT

<213> Mus musculus

<400> 17

Gly Gly Arg Pro Gln Lys Val Ala Ala His Ile Thr Gly Ile Thr Arg  
1 5 10 15  
Arg Ser Asn Ser Ala Leu Ile Pro Ile Ser Lys Asp Gly Lys Thr Leu  
20 25 30  
Gly Gln Lys Ile Glu Ser Trp Glu Ser Ser Arg Lys Gly His Ser Phe  
35 40 45  
Leu Asn His Val Leu Phe Arg Asn Gly Glu Leu Val Ile Glu Gln Glu  
50 55 60  
Gly Leu Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Ala  
65 70 75 80  
Glu Asp Ala Ser Lys Met Val Ser Lys Asp Lys Val Arg Thr Lys Gln  
85 90 95  
Leu Val Gln Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Val  
100 105 110  
Leu Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Arg Asp Ala Glu Tyr  
115 120 125  
Gly Leu Tyr Ser Ile Tyr Gln Gly Gly Leu Phe Glu Leu Lys Lys Asn  
130 135 140  
Asp Arg Ile Phe Val Ser Val Thr Asn Glu His Leu Met Asp Leu Asp  
145 150 155 160  
Gln Glu Ala Ser Phe Phe Gly Ala Phe Leu Ile Asn  
165 170

<210> 18

<211> 143

<212> PRT

<213> Homo sapiens

<400> 18

Arg Ala Pro Phe Lys Lys Ser Trp Ala Tyr Leu Gln Val Ala Lys His  
1 5 10 15  
Leu Asn Lys Thr Lys Leu Ser Trp Asn Lys Asp Gly Ile Leu His Gly  
20 25 30  
Val Arg Tyr Gln Asp Gly Asn Leu Val Ile Gln Phe Pro Gly Leu Tyr  
35 40 45



Phe Ile Ile Cys Gln Leu Gln Phe Leu Val Gln Cys Pro Asn Asn Ser  
50 55 60  
Val Asp Leu Lys Leu Glu Leu Leu Ile Asn Lys His Ile Lys Lys Gln  
65 70 75 80  
Ala Leu Val Thr Val Cys Glu Ser Gly Met Gln Thr Lys His Val Tyr  
85 90 95  
Gln Asn Leu Ser Gln Phe Leu Leu Asp Tyr Leu Gln Val Asn Thr Thr  
100 105 110  
Ile Ser Val Asn Val Asp Thr Phe Gln Tyr Ile Asp Thr Ser Thr Phe  
115 120 125  
Pro Leu Glu Asn Val Leu Ser Ile Phe Leu Tyr Ser Asn Ser Asp  
130 135 140

<210> 19

<211> 143

<212> PRT

<213> Mus musculus

<400> 19

Ser Thr Pro Ser Lys Lys Ser Trp Ala Tyr Leu Gln Val Ser Lys His  
1 5 10 15  
Leu Asn Asn Thr Lys Leu Ser Trp Asn Glu Asp Gly Thr Ile His Gly  
20 25 30  
Leu Ile Tyr Gln Asp Gly Asn Leu Ile Val Gln Phe Pro Gly Leu Tyr  
35 40 45  
Phe Ile Val Cys Gln Leu Gln Phe Leu Val Gln Cys Ser Asn His Ser  
50 55 60  
Val Asp Leu Thr Leu Gln Leu Leu Ile Asn Ser Lys Ile Lys Lys Gln  
65 70 75 80  
Thr Leu Val Thr Val Cys Glu Ser Gly Val Gln Ser Lys Asn Ile Tyr  
85 90 95  
Gln Asn Leu Ser Gln Phe Leu Leu His Tyr Leu Gln Val Asn Ser Thr  
100 105 110  
Ile Ser Val Arg Val Asp Asn Phe Gln Tyr Val Asp Thr Asn Thr Phe  
115 120 125  
Pro Leu Asp Asn Val Leu Ser Val Phe Leu Tyr Ser Ser Ser Asp  
130 135 140

<210> 20

<211> 163

<212> PRT

<213> Homo sapiens

<400> 20

Asp Leu Ser Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro Leu  
1 5 10 15  
Lys Gly Gln Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala Phe Leu  
20 25 30  
Thr Ser Gly Thr Gln Phe Ser Asp Ala Glu Gly Leu Ala Leu Pro Gln  
35 40 45  
Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg Ala  
50 55 60  
Pro Pro Gly Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu Arg Ser  
65 70 75 80  
Ser Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu  
85 90 95  
Leu Leu Glu Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro Ala Arg  
100 105 110  
Arg Gln Gly Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly  
115 120 125  
Leu Val Gln Leu Arg Arg Gly Glu Arg Val Tyr Val Asn Ile Ser His  
130 135 140  
Pro Asp Met Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly Ala Val  
145 150 155 160  
Met Val Gly

<210> 21

<211> 159

<212> PRT

<213> Mus musculus

<400> 21

Asp Leu Asn Pro Glu Leu Pro Ala Ala His Leu Ile Gly Ala Trp Met  
1 5 10 15  
Ser Gly Gln Gly Leu Ser Trp Glu Ala Ser Gln Glu Glu Ala Phe Leu  
20 25 30  
Arg Ser Gly Ala Gln Phe Ser Pro Thr His Gly Leu Ala Leu Pro Gln  
35 40 45  
Asp Gly Val Tyr Tyr Leu Tyr Cys His Val Gly Tyr Arg Gly Arg Thr  
50 55 60  
Pro Pro Ala Gly Arg Ser Arg Ala Arg Ser Leu Thr Leu Arg Ser Ala

65                      70                      75                      80  
Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Arg Gly Ser Pro Glu Leu Leu  
                                 85                      90                      95  
Leu Glu Gly Ala Glu Thr Val Thr Pro Val Val Asp Pro Ile Gly Tyr  
                                 100                      105                      110  
Gly Ser Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly Leu Ala Gln Leu  
                                 115                      120                      125  
Arg Ser Gly Glu Arg Val Tyr Val Asn Ile Ser His Pro Asp Met Val  
                                 130                      135                      140  
Asp Tyr Arg Arg Gly Lys Thr Phe Phe Gly Ala Val Met Val Gly  
145                      150                      155

<210> 22

<211> 149

<212> PRT

<213> Homo sapiens

<400> 22

Ala His Ser Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser  
1                      5                      10                      15  
Lys Gln Asn Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu  
                                 20                      25                      30  
Gln Asp Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Val Pro Thr Ser  
                                 35                      40                      45  
Gly Ile Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr  
50                      55                      60  
Ser Pro Lys Ala Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln  
65                      70                      75                      80  
Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ser Gln  
                                 85                      90                      95  
Lys Met Val Tyr Pro Gly Leu Gln Glu Pro Trp Leu His Ser Met Tyr  
                                 100                      105                      110  
His Gly Ala Ala Phe Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His  
                                 115                      120                      125  
Thr Asp Gly Ile Pro His Leu Val Leu Ser Pro Ser Thr Val Phe Phe  
130                      135                      140  
Gly Ala Phe Ala Leu  
145

<210> 23

<211> 149

<212> PRT

<213> Mus musculus

<400> 23

Thr His Gly Ile Leu Lys Pro Ala Ala His Leu Val Gly Tyr Pro Ser  
1 5 10 15  
Lys Gln Asn Ser Leu Leu Trp Arg Ala Ser Thr Asp Arg Ala Phe Leu  
20 25 30  
Arg His Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Ile Pro Thr Ser  
35 40 45  
Gly Leu Tyr Phe Val Tyr Ser Gln Val Val Phe Ser Gly Glu Ser Cys  
50 55 60  
Ser Pro Arg Ala Ile Pro Thr Pro Ile Tyr Leu Ala His Glu Val Gln  
65 70 75 80  
Leu Phe Ser Ser Gln Tyr Pro Phe His Val Pro Leu Leu Ser Ala Gln  
85 90 95  
Lys Ser Val Tyr Pro Gly Leu Gln Gly Pro Trp Val Arg Ser Met Tyr  
100 105 110  
Gln Gly Ala Val Phe Leu Leu Ser Lys Gly Asp Gln Leu Ser Thr His  
115 120 125  
Thr Asp Gly Ile Ser His Leu His Phe Ser Pro Ser Ser Val Phe Phe  
130 135 140  
Gly Ala Phe Ala Leu  
145

<210> 24

<211> 152

<212> PRT

<213> Homo sapiens

<400> 24

Arg Thr Pro Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln  
1 5 10 15  
Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu  
20 25 30  
Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser Glu  
35 40 45  
Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys  
50 55 60  
Pro Ser Thr His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val  
65 70 75 80

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<210> 25
<211> 29
<212> PRT
<213> Artificial

<220>
<223> Description of Artificial Sequence:AGP-3 RELATED PROTEIN
<220>
<221> misc_feature
<223> Positions 11, 16, 19, X = any naturally occurring amino acid residue
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Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe  
20 25

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<210> 26
<211> 25
<212> PRT
<213> Artificial
<220>
<223> Description of Artificial Sequence:CONSENSUS
<220>
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<221> misc\_feature

<223> Position 5, X = any naturally occurring amino acid residue.

<400> 26

Ala Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp  
1 5 10 15

Glu Leu Ser Leu Val Thr Leu Phe Arg  
20 25

<210> 27

<211> 142

<212> PRT

<213> Artificial

<220>

<223> Description of Artificial Sequence:CONSENSUS

<220>

<221> misc\_feature

<223> Positions 43, 45, 46, 54, 61-63, 68, 95, 109, 116, 129, 130, 133:  
X = any naturally occurring amino acid residue

<400> 27

Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Xaa Thr Pro Thr Ile Xaa  
1 5 10 15

Lys Gly Xaa Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly  
20 25 30

Xaa Ala Leu Glu Glu Lys Glu Asn Lys Ile Xaa Val Xaa Xaa Thr Gly  
35 40 45

Tyr Phe Phe Ile Tyr Xaa Gln Val Leu Tyr Thr Asp Xaa Xaa Xaa Ala  
50 55 60

Met Gly His Xaa Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu  
65 70 75 80

Leu Ser Leu Val Thr Leu Phe Arg Cys Ile Gln Asn Met Pro Xaa Thr  
85 90 95

Leu Pro Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala Xaa Leu Glu Glu  
100 105 110

Gly Asp Glu Xaa Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser  
115 120 125

Xaa Xaa Gly Asp Xaa Thr Phe Phe Gly Ala Leu Lys Leu Leu

$\langle 210 \rangle$	32
$\langle 211 \rangle$	25
$\langle 212 \rangle$	DNA

25

<400> 36  
atttgattct agaaggagga ataacatatg aacagccgta ataagcgtgc cgttcagggt 60



<210> 37

<211> 45

<212> DNA

<213> Homo sapiens

<400> 37

ccgcggatcc tcgagttaca gcagtttcaa tgcaccaaaa aatgt

45

<210> 38

<211> 17

<212> PRT

<213> Homo sapiens

<400> 38

Met Asp Tyr Lys Asp Asp Asp Asp Lys Lys Leu Asn Ser Arg Asn Lys  
1 5 10 15

Arg

<210> 39

<211> 48

<212> DNA

<213> Homo sapiens

<400> 39

gacgatgaca agaagcttaa cagccgtaat aagcgtgccg ttcagggt

48

<210> 40

<211> 151

<212> PRT

<213> Mus musculus

<400> 40

Gln Asn Ser Ser Asp Lys Pro Val Ala His Val Val Ala Asn His Gln  
1 5 10 15

Val Glu Glu Gln Leu Glu Trp Leu Ser Gln Arg Ala Asn Ala Leu Leu  
20 25 30

Ala Asn Gly Met Asp Leu Lys Asp Asn Gln Leu Val Val Pro Ala Asp  
 35 40 45  
 Gly Leu Tyr Leu Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys  
 50 55 60  
 Pro Asp Tyr Val Leu Leu Thr His Thr Val Ser Arg Phe Ala Ile Ser  
 65 70 75 80  
 Tyr Gln Glu Lys Val Asn Leu Leu Ser Ala Val Lys Ser Pro Cys Pro  
 85 90 95  
 Lys Asp Thr Pro Glu Gly Ala Glu Leu Lys Pro Trp Tyr Glu Pro Ile  
 100 105 110  
 Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Gln Leu Ser Ala  
 115 120 125  
 Glu Val Asn Leu Pro Lys Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val  
 130 135 140  
 Tyr Phe Gly Val Ile Ala Leu  
 145 150

<210> 41

<211> 1340

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (28) .. (906)

<400> 41

gtcgacccac gcgtccgatc ctgagta atg agt ggc ctg ggc cgg agc agg cga 54  
 Met Ser Gly Leu Gly Arg Ser Arg Arg  
 1 5  
 ggt ggc cgg agc cgt gtg gac cag gag gag cgc ttt cca cag ggc ctg 102  
 Gly Gly Arg Ser Arg Val Asp Gln Glu Glu Arg Phe Pro Gln Gly Leu  
 10 15 20 25  
 tgg aca ggg gtg gct atg aga tcc tgc ccc gaa gag cag tac tgg gat 150  
 Trp Thr Gly Val Ala Met Arg Ser Cys Pro Glu Glu Gln Tyr Trp Asp  
 30 35 40  
 cct ctg ctg ggt acc tgc atg tcc tgc aaa acc att tgc aac cat cag 198  
 Pro Leu Leu Gly Thr Cys Met Ser Cys Lys Thr Ile Cys Asn His Gln  
 45 50 55  
 agc cag cgc acc tgt gca gcc ttc tgc agg tca ctc agc tgc cgc aag 246  
 Ser Gln Arg Thr Cys Ala Ala Phe Cys Arg Ser Leu Ser Cys Arg Lys  
 60 65 70

gag	caa	ggc	aag	ttc	tat	gac	cat	ctc	ctg	agg	gac	tgc	atc	agc	tgt	294
Glu	Gln	Gly	Lys	Phe	Tyr	Asp	His	Leu	Leu	Arg	Asp	Cys	Ile	Ser	Cys	
75						80					85					
gcc	tcc	atc	tgt	gga	cag	cac	cct	aag	caa	tgt	gca	tac	ttc	tgt	gag	342
Ala	Ser	Ile	Cys	Gly	Gln	His	Pro	Lys	Gln	Cys	Ala	Tyr	Phe	Cys	Glu	
90					95					100					105	
aac	aag	ctc	agg	agc	cca	gtg	aac	ctt	cca	cca	gag	ctc	agg	aga	cag	390
Asn	Lys	Leu	Arg	Ser	Pro	Val	Asn	Leu	Pro	Pro	Glu	Leu	Arg	Arg	Gln	
				110					115					120		
cgg	agt	gga	gaa	gtt	gaa	aac	aat	tca	gac	aac	tgc	gga	agg	tac	caa	438
Arg	Ser	Gly	Glu	Val	Glu	Asn	Asn	Ser	Asp	Asn	Ser	Gly	Arg	Tyr	Gln	
		125						130					135			
gga	ctg	gag	cac	aga	ggc	tca	gaa	gca	agt	cca	gct	ctc	ccg	ggg	ctg	486
Gly	Leu	Glu	His	Arg	Gly	Ser	Glu	Ala	Ser	Pro	Ala	Leu	Pro	Gly	Leu	
		140					145					150				
aag	ctg	agt	gca	gat	cag	gtg	gca	ctg	gtc	tac	agc	acg	ctg	ggg	ctc	534
Lys	Leu	Ser	Ala	Asp	Gln	Val	Ala	Leu	Val	Tyr	Ser	Thr	Leu	Gly	Leu	
	155					160					165					
tgc	ctg	tgt	gcc	gtc	ctc	tgc	tgc	ttc	ctg	gtg	gcg	gtg	gcc	tgc	ttc	582
Cys	Leu	Cys	Ala	Val	Leu	Cys	Cys	Phe	Leu	Val	Ala	Val	Ala	Cys	Phe	
170					175					180					185	
ctc	aag	atg	agg	ggg	gat	ccc	tgc	tcc	tgc	cag	ccc	cgc	tca	agg	ccc	630
Leu	Lys	Met	Arg	Gly	Asp	Pro	Cys	Ser	Cys	Gln	Pro	Arg	Ser	Arg	Pro	
				190					195					200		
cgt	caa	agt	ccg	gcc	aag	tct	tcc	cag	gat	cac	gcg	atg	gaa	gcc	ggc	678
Arg	Gln	Ser	Pro	Ala	Lys	Ser	Ser	Gln	Asp	His	Ala	Met	Glu	Ala	Gly	
			205					210					215			
agc	cct	gtg	agc	aca	tcc	ccc	gag	cca	gtg	gag	acc	tgc	agc	ttc	tgc	726
Ser	Pro	Val	Ser	Thr	Ser	Pro	Glu	Pro	Val	Glu	Thr	Cys	Ser	Phe	Cys	
		220					225					230				
ttc	cct	gag	tgc	agg	gcg	ccc	acg	cag	gag	agc	gca	gtc	acg	cct	ggg	774
Phe	Pro	Glu	Cys	Arg	Ala	Pro	Thr	Gln	Glu	Ser	Ala	Val	Thr	Pro	Gly	
	235					240					245					
acc	ccc	gac	ccc	act	tgt	gct	gga	agg	tgg	ggg	tgc	cac	acc	agg	acc	822
Thr	Pro	Asp	Pro	Thr	Cys	Ala	Gly	Arg	Trp	Gly	Cys	His	Thr	Arg	Thr	
250					255					260					265	
aca	gtc	ctg	cag	cct	tgc	cca	cac	atc	cca	gac	agc	ggc	ctt	ggc	att	870
Thr	Val	Leu	Gln	Pro	Cys	Pro	His	Ile	Pro	Asp	Ser	Gly	Leu	Gly	Ile	
				270					275					280		
gtg	tgt	gtg	cct	gcc	cag	gag	ggg	ggc	cca	ggt	gca	taa	atggggg			916
Val	Cys	Val	Pro	Ala	Gln	Glu	Gly	Gly	Pro	Gly	Ala					
			285					290								
tcagggagg	ggg	aaaggaggag	ggagagagat	ggagaggagg	ggagagagaa	agagaggtgg										976
ggagagggga	gagagatatg	aggagagaga	gacagaggag	gcagagaggg	agagaaacag											1036
aggagacaga	gagggagaga	gagacagagg	gagagagaga	cagagaggaa	gagaggcaga											1096
gagggaaaga	ggcagagaag	gaaagagaca	ggcagagaag	gagagaggca	gagagggaga											1156

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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<210> 42
<211> 293
<212> PRT
<213> Homo sapiens
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Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp  
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg  
20 25 30

Ser Cys Pro Glu Glu Gln ~~Tyr~~ Trp Asp Pro Leu Leu Gly Thr Cys Met  
35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala  
50 55 60

Phe Cys Arg Ser ~~Leu~~ Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp  
65 70 75 80

His Leu Leu Arg/Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His  
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val  
100 105 110

Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser Gly Glu Val Glu Asn  
115 120 125

Asn Ser ~~Asp~~ Asn Ser Gly Arg Tyr Gln Gly Leu Glu His Arg Gly Ser  
130 135 140

Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu Ser Ala Asp Gln Val  
145 150 155 160

~~Ala~~ Leu Val Tyr Ser Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys  
165 170 175

Cys Phe Leu Val Ala Val Ala Cys Phe Leu Lys Met Arg Gly Asp Pro  
180 185 190

Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg Gln Ser Pro Ala Lys Ser  
195 200 205

Ser Gln Asp His Ala Met Glu Ala Gly Ser Pro Val Ser Thr Ser Pro  
210 215 220

Glu Pro Val Glu Thr Cys Ser Phe Cys Phe Pro Glu Cys Arg Ala Pro  
225 230 235 240

Thr Gln Glu Ser Ala Val Thr Pro Gly Thr Pro Asp Pro Thr Cys Ala  
245 250 255

Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val Leu Gln Pro Cys Pro  
260 265 270

His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys Val Pro Ala Gln Glu  
275 280 285

Gly Gly Pro Gly Ala  
290

<210> 43

<211> 291

<212> PRT

<213> Homo sapiens

<400> 43

Met Ser Gly Leu Gly Arg Ser Arg Arg Gly Gly Arg Ser Arg Val Asp  
1 5 10 15

Gln Glu Glu Arg Phe Pro Gln Gly Leu Trp Thr Gly Val Ala Met Arg  
20 25 30

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met  
35 40 45

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala  
50 55 60

Phe Cys Arg Ser Leu Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp  
65 70 75 80

His Leu Leu Arg Asp Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His  
85 90 95

Pro Lys Gln Cys Ala Tyr Phe Cys Glu Asn Lys Leu Arg Ser Pro Val

100					105					110					
Asn	Leu	Pro	Pro	Glu	Leu	Arg	Arg	Gln	Arg	Ser	Gly	Glu	Val	Glu	Asn
		115					120					125			
Asn	Ser	Asp	Asn	Ser	Gly	Arg	Tyr	Gln	Gly	Leu	Glu	His	Arg	Gly	Ser
		130					135					140			
Glu	Ala	Ser	Pro	Ala	Leu	Pro	Gly	Leu	Lys	Leu	Ser	Ala	Asp	Gln	Val
							150					155			
Ala	Val	Tyr	Ser	Thr	Leu	Gly	Leu	Cys	Leu	Cys	Ala	Val	Leu	Cys	Cys
				165					170					175	
Phe	Leu	Val	Ala	Val	Ala	Cys	Phe	Leu	Lys	Met	Arg	Gly	Asp	Pro	Cys
			180					185					190		
Ser	Cys	Gln	Pro	Arg	Ser	Arg	Pro	Arg	Gln	Ser	Pro	Ala	Lys	Ser	Ser
			195				200					205			
Gln	Asp	His	Ala	Met	Glu	Ala	Gly	Ser	Pro	Val	Ser	Thr	Ser	Pro	Glu
							215					220			
Pro	Val	Glu	Thr	Cys	Ser	Phe	Cys	Phe	Pro	Glu	Cys	Arg	Ala	Pro	Thr
							230					235			
Gln	Glu	Ser	Ala	Val	Thr	Pro	Gly	Thr	Pro	Asp	Thr	Cys	Ala	Gly	Arg
				245					250					255	
Trp	Gly	Cys	His	Thr	Arg	Thr	Thr	Val	Leu	Gln	Pro	Cys	Pro	His	Ile
				260				265					270		
Pro	Asp	Ser	Gly	Leu	Gly	Ile	Val	Cys	Gly	Pro	Ala	Gln	Glu	Gly	Gly
				275			280					285			
Pro	Gly	Ala													
			290												

<210> 44

<211> 32

<212> PRT

<213> Homo sapiens

<400> 44

Met	Ser	Gly	Leu	Gly	Arg	Ser	Arg	Arg	Gly	Gly	Arg	Ser	Arg	Val	Asp
1				5					10					15	

Gln	Glu	Glu	Arg	Phe	Pro	Gln	Gly	Leu	Trp	Thr	Gly	Val	Ala	Met	Arg
			20					25					30		

<210> 45

<211> 37

<212> PRT

<213> Homo sapiens

<400> 45

Ser Cys Pro Glu Glu Gln Tyr Trp Asp Pro Leu Leu Gly Thr Cys Met  
1 5 10 15

Ser Cys Lys Thr Ile Cys Asn His Gln Ser Gln Arg Thr Cys Ala Ala  
20 25 30

Phe Cys Arg Ser Leu  
35

<210> 46

<211> 38

<212> PRT

<213> Homo sapiens

<400> 46

Ser Cys Arg Lys Glu Gln Gly Lys Phe Tyr Asp His Leu Leu Arg Asp  
1 5 10 15

Cys Ile Ser Cys Ala Ser Ile Cys Gly Gln His Pro Lys Gln Cys Ala  
20 25 30

Tyr Phe Cys Glu Asn Lys  
35

<210> 47

<211> 57

<212> PRT

<213> Homo sapiens

<400> 47

Leu Arg Ser Pro Val Asn Leu Pro Pro Glu Leu Arg Arg Gln Arg Ser  
1 5 10 15

Gly Glu Val Glu Asn Asn Ser Asp Asn Ser Gly Arg Tyr Gln Gly Leu  
20 25 30

Glu His Arg Gly Ser Glu Ala Ser Pro Ala Leu Pro Gly Leu Lys Leu  
35 40 45

Ser Ala Asp Gln Val Ala Val Tyr Ser  
50 55

<210> 48

<211> 21

<212> PRT

<213> Homo sapiens

<400> 48

Thr Leu Gly Leu Cys Leu Cys Ala Val Leu Cys Cys Phe Leu Val Ala  
1 5 10 15

Val Ala Cys Phe Leu  
20

<210> 49

<211> 106

<212> PRT

<213> Homo sapiens

<400> 49

Lys Met Arg Gly Asp Pro Cys Ser Cys Gln Pro Arg Ser Arg Pro Arg  
1 5 10 15

Gln Ser Pro Ala Lys Ser Ser Gln Asp His Ala Met Glu Ala Gly Ser  
20 25 30

Pro Val Ser Thr Ser Pro Glu Pro Val Glu Thr Cys Ser Phe Cys Phe  
35 40 45

Pro Glu Cys Arg Ala Pro Thr Gln Glu Ser Ala Val Thr Pro Gly Thr  
50 55 60

Pro Asp Thr Cys Ala Gly Arg Trp Gly Cys His Thr Arg Thr Thr Val  
65 70 75 80

Leu Gln Pro Cys Pro His Ile Pro Asp Ser Gly Leu Gly Ile Val Cys  
85 90 95

Gly Pro Ala Gln Glu Gly Gly Pro Gly Ala  
100 105

<210> 50

<211> 32

<212> DNA

<213> Homo sapiens

<400> 50

tctccaagct tccgatacctg agtaatgagt gg

<210> 51

<211> 34



<213> Homo sapiens

34

<211> 6

<213> Homo sapiens

Gly Ala Leu Lys Leu Leu  
1 5